

**DECLARATION PURSUANT TO 37 C.F.R. 61.131**

Dear Sir:

We, Tracy E. Thieret and Sam A. Fedele declare as follows:

1. We are the inventors of the subject matter claimed in U.S. Patent Application Serial No. 10/759,682.
2. We are aware that claims in the above-captioned U.S. Patent Application stand rejected in the Office Action dated June 6, 2006 under 35 U.S.C. §103(a) as being unpatentable over Seseek, et al (U.S. Publication No. 2005/0097405) in view of Carpenter et al (U.S. Patent No. 6,260,048). We are further aware that for purposes of 35 U.S.C. 35 §103(a), the effective date of the Seseek reference is November 3, 2003.
3. We are further aware that claims in the above-captioned U.S. Patent Application also stand rejected in the Office Action dated June 6, 2006 under 35 U.S.C. §103(a) as being unpatentable over Seseek, et al (U.S. Publication No. 2005/0097405) in view of Carpenter et al (U.S. Patent No. 6,260,048) and further in view of Pfeiffer et al (U.S. Patent Publication No. 2004/0078722). We are aware that for the purposes of 35 U.S.C §103(a), the effective date of the Pfeiffer reference is September 30, 2002.
4. All of the facts described hereinafter occurred in the United States of America.
5. In Exhibit A, submitted herewith, a copy of the Invention Proposal dated August 20, 2001 is presented. Exhibit A demonstrates that we conceived the pertinent subject matter as discussed in the Seseek and Pfeiffer


references and claimed by us in the above-captioned patent application prior to the effective date of the Sesek and Pfeiffer references.

6. The Inventor's disclosure form was subsequently submitted to the Xerox Intellectual Property Law Department for processing within the Xerox Corporation. Thereafter, a patent application was drafted at Ortiz and Lopez, PLLC, resulting in a constructive reduction to practice upon filing with the USPTO.

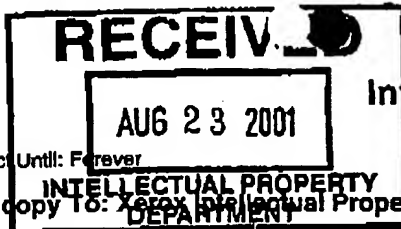
7. The Applicants therefore submits this declaration under 37 CFR 1.131 overcomes the prior art rejections in the Office Action dated September 6, 2006 by proving that the conception of the claimed subject matter is prior to the effective date of the Sesek and Pfeiffer references relied upon by the Examiner in the rejections set forth in the September 6, 2006 Office Action, thereby removing the Sesek and Pfeiffer references as a prior art reference as asserted by the Examiner in the September 6, 2006 Office Action.

8. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such willful false statements may jeopardize the validity of the application, and patent issuing thereon, or any patent to which this declaration is directed.

  
Tracy E. Thieret

  
Sam A. Fedele 11-30-2006

Dated: November 30, 2006



## Invention Proposal

THE DOCUMENT COMPANY  
XEROX

IPA11116

IPD

Signed hard copy to: Xerox Intellectual Property Law Department

- ☐ Xerox Square -20A, Rochester, NY 14644, MailStop XRX2-20A - Send electronic version to your mgr. & copy to: USA.IPLD.MC@mc.usa.xerox.com
- ☐ El Segundo, CA, 1990 Xerox Centre Dr. 90245, MailStop ESC1-405 - Send electronic version to your mgr. & copy to: USA.IPLD.ES@mc.usa.xerox.com
- ☐ Palo Alto, CA, 3333 Coyote Hill Road 94304, MailStop: PARC - Send electronic version to your mgr. & copy to: USA.IPLD.PA@mc.usa.xerox.com

1	Proposal Submitted By (Please use legal name) Full First Name, Middle, Last <b>Tracy E. Thieret</b>	Employee No. <b>80219N</b>	Extension <b>x25287</b>
	Organization (Unit/Div./Dept./Section) <b>XRT/WCRT/MEL/Mechatronics</b>	Electronic Mail Address <b>TThieret@CRT.Xerox.com</b>	Building No./ Mail Stop <b>0114-41D</b>
2	Proposal Submitted By (Please use legal name) Full First Name, Middle, Last <b>Sam A. Fedele</b>	Employee No. <b>80406a</b>	Extension <b>x23533</b>
	Organization (Unit/Div./Dept./Section) <b>GSG/OESBT</b>	Electronic Mail Address <b>Sam.Fedele@USA.Xerox.com</b>	Building No./ Mail Stop <b>0111-02J</b>
3	Proposal Submitted By (Please use legal name) Full First Name, Middle, Last	Employee No.	Extension
	Organization (Unit/Div./Dept./Section)	Electronic Mail Address	Building No./ Mail Stop
			Fax No.

\* If space for additional submitters is required, please use another sheet; and attach any supplementary Comments.

Manager <b>Dennis Martin</b>	Electronic Mail Address <b>Dennis.Martin@usa.Xerox.com</b>	Bldg. No./MS <b>0111-02J</b>
---------------------------------	---	---------------------------------

Technical Category <b>1.6 Networked Document Systems</b>	Name of Xerox Program (if any) <b>Spectre/Goldfinger</b>
---	---

Opportunity for licensing revenue Who could be interested in it? How is this better than alternatives?

Any Company who uses Help Desks to service customer problems with devices that can communicate information about their state. In particular, the BroadBase (explained below) software vendor would license this technology from Xerox as an adjunct to their conversation-based solution.

Descriptive title of invention

## Application of Live Machine Data to Customer / Help Desk Fault Isolation Processes

Describe the problem How was this problem tackled before your invention?

Currently Xerox Welcome Centers rely solely on a conversation with the customer as the first level of support for fixing problems that customers have with their Xerox products. This conversation is costly (\$4/call and \$1/minute \* 1,000,000/month) and often annoying to the Customer. The conversation consists of a series of questions asked of the customer by Welcome Center personnel. The question sequence asked by the Welcome Center personnel is the programmed response of Case Base software that is navigating a fault isolation tree.

Summary of the invention Describe briefly what the invention is and how it works in 5-8 lines.

The invention is to augment the customer conversation with data obtained remotely from the machine in question. If the Case Base were constructed to consult a file received from the machine (or database populated by the machine) containing labeled machine identification, diagnostic, and state data, the call duration would be considerably shortened. Questions that are answerable by the data in the file would not be asked of the customer.

Alternatively, calls might be eliminated completely were the same machine data to be used to feed a Web-based or local fault isolation tree navigated directly by the end customer in lieu of calling the help desk.

In both of the above applications, the diagnostic scope of the Case Base itself is broadened since the availability of machine data enables additional nodes to be added to the core fault isolation tree. When machine data are available, a more detailed representation of the situation would be available than a conversation with the customer would provide. This enhancement augments the tree's solution set while increasing its precision.

Describe your invention Describe how to make and use the invention and its novel embodiments. Cover the process, method, materials with sketches, flow charts, usage etc. What are the advantages of your invention for Xerox?

The objective of this invention is to eliminate or reduce the duration of calls coming to the Welcome Center. Detailed analysis of the application of this technology for the Lakes ST class of machines indicated that there is substantial revenue to be gained by this approach.

*cost reduction*

Witnessed and Understood By <i>[Signature]</i>	Date <b>8-20-01</b>
Submitter(s) Signature(s) <i>Tracy E. Thieret 8/15/01 Samuel A. Fedele</i>	Date <b>8-20-2001</b>



Protect Until: Forever

IPA11116

Currently, the only source of data for the call to the Welcome Center is the conversation with the customer. Typically, the conversation will require that the customer return to the machine location to relay a piece of information that the machine is displaying. The single most useful datum for diagnosing a failed machine is the fault code displayed on the console. Besides that there are many other useful data that are useful for determining the cause of failure in devices.

Many of these devices are connected or connectable to networks. For those machines, it is a relatively simple matter to obtain the data directly from the machine via the network connection. This invention is about making these data useful to the Level 1 diagnostic process. This is part of the Corporate plan to "move service to the left." That is to provide tools and infrastructure closer to the customer so that in many cases the customers can solve the problem themselves and, barring that, properly triage the problem at the Welcome Center level quickly to dispatch the most appropriate resource to the customer site to accomplish the repair.

The eService (George Barnes/IM) initiative has identified the BroadBase software application as the principle Welcome Center interactive tool. As before with the Case Base tools, the only source of information about the machine in this application is from the customer conversation. We propose to augment that information with machine data so as to answer many of the questions before they are asked of the customer. This will save time and in some cases eliminate the call altogether.

There are many mechanisms to accomplish this. An intelligent machine would be able to diagnose its own state of health and armed with this information provide the correct solution autonomously. Barring this advance in machine intelligence there are many steps along the way. The following is merely an example of the possibilities for beginning this process.

The Welcome Center Application is structured as a directed graph. That is, there is a root node where the inquiry begins. At each node there is a question to be asked and a set of possible answers. Each of these answers leads to another node with another question. This process continues (sometimes with as many as 10 questions in the Lakes Case Base) until the leaf node containing the action to be taken is reached. It is this action that addresses the Customer's problem with the machine. It may involve transmitting information, resetting a machine parameter, instructing the customer to perform some operation, or escalation of the problem to Second (or higher) level Customer Support.

Suppose that the machine provided a file of labeled data that contained a set of information about its identification, location, configuration, and current state. This is currently possible because almost every connected Xerox device presents a data interface of some kind to the network that may be queried. Suppose that this interface was queried by an outside application (as a second step the machine would provide this data file on its own) and a file of labeled data were constructed and made available to the Welcome Center Application.

Suppose in addition that the Welcome Center Application (the directed graph) performed a check of the labeled machine data file before asking each question at the next node in the graph. Each node would check the data file for the presence of a particular label. If that label were found, then the data associated with the label would be used as the answer to the question. The machine would then have answered the question and asking the question of the customer is unnecessary.

Furthermore, if the action required of the case being followed were something that the Welcome Center Application could accomplish, have it do so. In the early embodiments this could include call escalation, initiation of the parts ordering process with Xerox Supplies, or, in more advanced systems, adjusting parameters in the machine to address the problem or enable the machine to limp along until service personnel could arrive.

There are a host of available mechanisms for labeling the machine data, however, the preferred embodiment is to use the eXtensible Markup Language (XML). XML provides for a definition of the allowed parameters, their communication between enabled devices, and labeling the data using tags so defined and communicated. XML is rapidly becoming the *lingua franca* of the network and displacing HTTP because HTTP provides only layout definition rather than content identification. Thus, as increased capacity is developed in the machine, it could be articulated even though the Welcome Center Application didn't yet use the information. Also, should the Welcome Center Application request some data that the machine in question does not yet provide, the customer could be prompted to answer and the normal process of Welcome Center triage would result.

RECEIVED

AUG 23 2001

INTELLECTUAL PROPERTY  
DEPARTMENT

Date

8-23-01

Date

8-20-2001

Witnessed and Understood By

Submitter(s) Signature(s)

Form 50136 (10/1/99) Legal

Page 2

Invention Proposal (Office 97)



Protect Until: Forever

IPA11116

**People** List names of others known to have worked on this or a similar invention

George Barnes, Shelley Taylor: Information Management

**Related concepts** Check the Xerox Patent data base at <http://comip.wrc.xerox.com/comip/icbuhome.nsf>  
 What have you found in a data base search of the topic? Give patent or IP number of the most relevant items.

**Prototype** Has a model, a prototype, or experiment of the invention been built, made, run or tested?☐ Yes ☐ No

No

**Xerox product** Is the invention used by Xerox or is there a definite plan for use in a future product(s)?☐ Yes ☐ No

If so, please identify the program(s) or product(s), and introduction dates:

Yes. In our conversations with Shelley Taylor, George Barnes (IM), Dennis Martin (GSG/Output Management), Jack Blintz, Vicky Hurley (OGS/Post Sale Strategy), Bob White (PSG/Service Strategy) and Larry Banks (OSG/Service Strategy), they are anxious to see this application implemented in the Welcome Center Process.

Shelley and George view this as the next step in getting service costs down beginning at the Welcome Center. The BroadBase software application is the Knowledge Base application that is being used by every product program to implement their Welcome Center call processes. We propose to encourage BroadBase to add this strategically important feature to their software.

**Disclosures** Has this concept been disclosed to vendors, consultants, outside parties, partners, etc? Indicate the date(s) of any previous or planned future disclosure external to Xerox, and identify the type of disclosure (by agreement, demonstration, paper or presentation given, market probe, published article, etc., and if convenient, please provide a copy of the agreement, paper or article):

No. Not yet. It is our intention to introduce this concept to the BroadBase software application vendor for inclusion into Xerox's next Welcome Center Knowledge Base software. BroadBase does not have this notion in their products, nor are they pursuing this course. We considered that Xerox should have proprietary rights to this invention prior to our addressing the vendor.

**Outside funding** Source of outside funding, if any:

None

Witnessed and Understood by

Date

Submitter(s) Signature(s)

Date

Form 53135 (10/1999) Legal

Page 3

Invention Proposal (Office 97)



Protect Until: Forever

## Manager's Comment Section

IPA11116

Submitter(s): <b>Tracy E. Thieret &amp; Sam A. Fedele</b>	
Title of Invention <b>Inclusion of Machine Data into the Help Desk Problem Solving Process</b>	
Manager's Name <b>Dennis Martin</b>	Date <b>August 5, 2001</b>
1. Problem addressed or function provided by the invention: <i>Example 1A: Finisher cost reduction</i> <b>INSERTION OF LIVE DATA AND CURRENT RESULTS ENHANCES SIGNIFICANTLY THE ASSISTANCE THAT CAN BE PROVIDED TO OUR CUSTOMERS IN BEING ABLE TO SOLVE PROBLEMS, IMPROVE PROBLEM SOLVING TIME, REDUCE COST AND IMPROVE CUSTOMER SATISFACTION</b> <i>Example 1B: Uses low cost LCD to write annotation messages</i>	
2. Central thrust of the invention: <i>Example 2A: Design incorporates fewer parts</i> <b>APPLICATION OF LIVE MACHINE DATA TO KNOWLEDGE BASE IMPROVES (REDUCES) DIAGNOSTIC TIMES, WORK PROCESSES AND THE CUSTOMER'S ABILITY TO SOLVE PROBLEMS</b> <i>Example 2B: Uses low cost LCD to write annotation messages</i>	
3. Could invention have impact beyond current description? <i>Example 3A: Could also function for printer finisher</i> <b>THIS APPLICATION COULD VIRTUALLY ELIMINATE THE NEED FOR ON-SITE SERVICE FOR CASES NOT REQUIRING PARTS REPLACEMENT</b> <i>Example 3B: Could also function to erase/edit copy</i>	
4. Potential for Xerox application. Specify product or technology program if possible: <i>Example 4A: Mainline approach in Program O</i> <b>COMBINED WITH eSERVICE, THIS APPLICATION COULD BENEFIT ALL PRODUCT PROGRAMS AND ENHANCE OUR (XEROX) CORE COMPETENCE IN SERVICE</b> <i>Example 4B: Adds significant feature to future products</i>	
5. Value to competitors; potential for license or trade: <i>Example 5A: Enables much lower cost finishing than any known system and opens possibilities of moving finishing down-market</i> <b>COULD BE LICENSED OR MANAGED AS A BUSINESS BY XEROX. AN COMPANIES WITH SERVICE ORGANIZATIONS COULD BENEFIT.</b> <i>Example 5B: Could be licensed in a business area un-related to Xerox</i>	
6. Please indicate any related patents, publications, or activities you know of: <b>EUREKA SERVICE KNOWLEDGE BASE (XEROX PRODUCT)</b>	
7. I would recommend the following form(s) of protection: <input checked="" type="checkbox"/> Patent <input type="checkbox"/> Defense publication <input type="checkbox"/> Keep trade secret <input type="checkbox"/> None	
Comments:	